## THE ESSENTIAL FEATURES OF SUCCESSFUL FARMING: PERMANENCE, HEALTH AND BEAUTY

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Editor's Note:

This paper reports the 1979 Presidential address of the Tropical Grassland Society of Australia. It was delivered by Mr. Ron Pechey at the Annual General Meeting of the Society held at his property "Listening Ridge", near the town of Pechey named after Mr. Pechey's grandfather. The property and homestead are one of the oldest in the district. It was a most appropriate venue for Mr. Pechey's eloquent address in which he successfully brought together the practicalities of modern day farming with a philosophic background arising from a lifetime of love for the land.

I have taken the title of my address from Schumacher's bestseller "Small is Beautiful" because his philosophy seems to be especially apposite for farmers and graziers if they are working in a tropical environment.

An acquaintance with whom I discussed this paper immediately said "You have left out the main thing—money. You can't have those other things unless you're making a living first". I entered a plea of "Not Guilty your Worship" and reminded him, with a little becoming modesty, that Confucius said "the wise man knows what is right, and the inferior man knows what will pay". I was sentenced to the rising of the Court, before he departed with some incoherent protest, and, I suspect, he is one of those who discounts the possibility of any civilisation north of Torres Straits.

It was the American novelist Louis Bromfield<sup>2</sup> who said that Western man is behaving like a reckless son who inherited too much money and may end by destroying his own habitat. And indeed, we have come to think of civilisation as entirely a matter of motor cars, T.V. and plumbing, although none of these things has much to do with the advance of civilisation, which is a matter of man's upbringing, his spirit, and his sense of humanity. But whatever our accomplishments our sophistication and our artistic pretensions, we surely owe our existence to a few inches of top soil.

So, I am going to start with "Permanence" because that must be the first consideration in a tropical environment. It is possibly true to say that the soils in some temperate areas are in better shape after hundreds of years of farming than they were originally. Also some of the river valleys—and those incredible terraced fields of Asia—give some prospect of permanence, but elsewhere rain and wind and salt have left a grim warning to those who fight against nature instead of working with her.

Now this district was selected for farming between about 1870–1910. Originally there were magnificent stands of forest and scrub timber between Toowoomba and Yarraman, but when the wiley free-selectors from England, Germany, and Ireland arrived, potatoes and maize were used as cash crops and dairying held sway for three generations. The name of this farm "Listening Ridge" goes back over 100 years to the days when teamsters looking for their working bullocks came here early in the morning to listen for the cow-bells in the valley.

In the thirties, the tractor arrived and rain became something of a mixed blessing. The farmer, listening to it beating down on the roof at night, thought of his topsoil making a one-way express trip down the Brisbane River to the Pacific Ocean and it was not long before he realised that no system of tillage or diversion banks would solve the erosion problem on these slopes. It was possibly a not very energetic farmer who first realised you can feed dairy-cows reasonably well on grass. It was

Confucius Analects iv. 16. World Classics Series: Oxford University Press p. 32 (1937).
L. Bromfield (1947) "Pleasant Valley" Cassel & Co. p. 242 et seq.

noticed that the old wild white clover had sprung up in some paddocks and was very useful—for about three months of the year. A man called Albert Vonhoff used to collect black medic seeds in a jam billy and sprinkle them along the cattle pads. I recall an allotment in Crow's Nest about 1947, that had been topdressed by Angus MacDiarmid—he had the best pastures in the district that year on what was very poor box country. By the 1950's, we were beginning to use improved varieties of white clover (Ladino, Louisiana and N.Z. White) and to super small areas on a trial basis. Then began the renovation of many an old "washed-out" paddock. These worn out pastures, generally of hard sod-bound paspalum, abandoned cultivation, will take at least another generation to be as productive as similar soils that have not been abused. They need a dressing of about 200 kg super per hectare every year. The quickest way to restore them is by the use of piggery effluent, if available.

Throughout the Crows Nest district, it is now recognised that pastures using mainly white clover and Siratro are the answer to the problem of permanence and costs. On the flatter areas some form of crop rotation may emerge. Unfortunately lucerne has been eclipsed, not by aphid, but by the two very aggressive grasses—paspalum and kikuyu. However, their very permanence and aggressiveness is a great asset here and they have become truly permanent pastures requiring very little attention, except top dressing from time to time. We use little N fertilizer—why buy something out of a factory when the sun and the legumes are in the partnership with you in a solar energy enterprise?

Of course permanence should also be the aim in respect of farm improvements, for although a farmer may be driven by lack of capital to erect temporary structures, you find generally that substantial fences, yards, troughs, and buildings turn out to be cheaper in the long run. How often, when travelling in the older settled areas down south, is one struck by the charm and character of those early farm buildings.

Of course, permanent improvements cost money—the great elusive! But in this respect, the pasture man is lucky—he can cut machinery to the bare minimum, if he can resist that slavish impulse which leads down the primrose path to clearing sales where expanses of ancient and modern equipment bear silent witness to the power of advertising.

Turning now to the second principle, "Health" of soil, environment and animals, upon which human health itself depends. Once your pastures have reached a certain stage of vigour and palatibility, you are off to a flying start. With an eye alert for signs of health and disease, you start by observing the soil structure, the living organisms which inhabit it, and the effects of rain, drought, heat, and frost, watching the interaction of all these factors with the herd. You try to gauge when to increase, when to reduce the grazing pressure, when to spell, slash or mow, renovate, or fertilize. On small holdings like this a crash grazing session is better and cheaper than mechanised intervention. What Sir George Stapledon<sup>3</sup> said of English pastures applies with equal force here—"Grassland improvement is impossible without the aid of heavy stocking and urine". With white clover, burning is out, so the alternative to heavy stocking is to mow or slash. But always leave some roughage in case of a bloat problem.

The pasture man is doubly lucky if he can concentrate on the most economic production per hectare, and resist the temptation to become obsessed with maximum production. We can achieve a stocking rate in this district of a beast to one hectare  $(2\frac{1}{2} \text{ acres})$  comfortably, without resorting to supplementary feeding. I have no doubt we could do much better, but it wouldn't pay under present circumstances, and part of the cost would be more health problems (e.g. parasites and bloat). At one hectare to the beast, you will get away with one or sometimes two dippings for external parasites (provided you don't have cattle ticks).

<sup>3.</sup> G. Stapledon (1940) "Plow Up Policy and Ley Farming" Faber & Faber p. 60.

The health as well as the nutritive value of our pastures seems to benefit from a diversity of plant composition—I should hate to see the day when we only have one grass and one legume on the farm. I believe there are many shrubs, herbs, and weeds that play an important part in stimulating the appetite and improving the food value. For example, *Angophora* spp. and edible scrub trees are relished by cattle, and perhaps bring up minerals which lie below the grass roots.

We lost a bullock this spring from bloat and that it always on the cards with clover pastures. Standing roughage, straw in hayracks or anti-bloat oil in the water, could have saved him, but he was just down from the dry country near Windorah and

he rushed into that clover like a bush boy into the surf.

About a third of this farm was originally vine scrub and the pioneers had the idea that it was much to be preferred, for it was cheaper to clear and seemed more fertile. But superphosphate has changed all that and we think the forest country just as valuable—and its lighter soils respond better to scanty rains which are the rule in spring, just then white clover needs moisture. Most of the forest country here has had 1–2 tonnes of superphosphate per hectare on the gravelly laterites, half of that being molybdenum fortified.

It looks as though we are going to have to live with buffalo fly each summer and back rubbers near watering points may be the answer. Incidentally, what a lot of work can be saved by having troughs situated in yards or small paddocks where cattle may be "trapped" instead of having to be mustered. You will notice that we leave the wait-a-bit vine (*Cudranea javanensis*) about our paddocks. These low growing prickly clumps inside which cattle will stand contentedly, when the sun is hot and the flies bad, are also God's gift to many small birds looking for nesting places out of reach of feral cats.

The third and last principal of "Beauty" has been extolled by poets good and bad for some time, and how fortunate accountants cannot put a monetary value on it—otherwise some ingenious nuisance in Canberra might devise another tax! Can we ourselves appreciate it? We are many of us aliens in this land, which as Harry Butler reminds us, we took from the gentle custody of the aboriginal. We have mined the soil with axe and plough, and match, lunatics have desecrated it with 4-wheel drives, polluted it with chemicals on the advice of business men, and littered it with can and bottle. We have yet to fall in love with it, although no doubt we have come some way from the point of view of Henry Lawson's "Selector's Daughter". "I want to go away from the bush—Oh God, help me to go away from the bush." But there is a strand in our Western culture, stretching back to Roman Vergil<sup>4</sup>, which extols farming as being fundamental to all civilisation, proclaiming the dignity of manual labour and our duty to cherish the land. Nowadays, when once again an urban implosion threatens to denude the land of people, it may be well to recall Schumacher's list of the three primary aims of all farming activity:

To keep man in touch with Nature.

To humanise and ennoble mans habitat (by returning what we take, avoiding monoculture, also the industrialisation and depersonalisation of the land).

To bring forth the food, clothing etc. necessary for a graceful life.

Australians are inclined to be a careless people—often full of repulsive jargon language—and we need to remind ourselves that understanding the beauty of this country is mostly of the heart and the eyes and the hands, rather than of the head. What can we do about it? Farmers, extension workers, and researchers need to become personally involved in "dressing and keeping the land" (as the book of Genesis puts it). Are we so poor a society that we cannot afford to look after the land

Vergil "The Georgies", Book 1 Loeb Classical Library.
E. F. Schumacher (1975) "Small is Beautiful" Perennial Library. Harper and Row. Chapter 7.

and keep it healthy and beautiful in perpetuity? To indicate how we ought to feel, I conclude with a little sentimental verse, which I recently came across, about a farm boy who used to climb his father's windmill tower.

"Our mill was tall and from its tower we boys gazed far away, Marking the creeks winding course to where the blue hills lay, No other land could ever seem so vast and fair and free, As that bright land stretched out below the windmill seemed to me."